

Title (en)

COMPRESSOR AND REFRIGERATION CYCLE APPARATUS

Title (de)

VERDICHTER UND KÜHLKREISVORRICHTUNG

Title (fr)

COMPRESSEUR ET APPAREIL À CYCLE DE RÉFRIGÉRATION

Publication

EP 3795835 A4 20210421 (EN)

Application

EP 18925400 A 20181212

Priority

- CN 201810729765 A 20180705
- CN 2018120658 W 20181212
- CN 201721811886 U 20171222

Abstract (en)

[origin: CN108799118A] The invention discloses a compressor and a refrigeration circulating device, and relates to the technical field of refrigeration. The compressor comprises a shell, and a driving module, a compressionmodule and an expansion module arranged in the shell, wherein the compression module is in drive connection with the driving module, and is used for performing multistage compression on a refrigerantunder driving by the driving module; and the expansion module is connected with the driving module, and is used for expanding the refrigerant compressed by the compression module. The refrigeration circulating device comprises the compressor. The invention mainly provides the compressor and the refrigeration circulating device; the compressor can perform multistage compression on the refrigerant,can expand the refrigerant after multistage compression, and can recover expansion power; each stage of the pressure difference, the leakage quantity of the refrigerant and the power consumption of the compressor are reduced; and the performance coefficients of the compressor and the refrigeration circulating device are improved.

IPC 8 full level

F04C 23/02 (2006.01); **F01C 1/32** (2006.01); **F01C 1/356** (2006.01); **F01C 11/00** (2006.01); **F01C 13/04** (2006.01); **F04C 18/32** (2006.01);
F04C 18/356 (2006.01); **F04C 23/00** (2006.01)

CPC (source: CN EP US)

F01C 1/32 (2013.01 - EP US); **F01C 1/356** (2013.01 - EP US); **F01C 11/006** (2013.01 - EP US); **F01C 13/04** (2013.01 - CN EP US);
F04C 18/322 (2013.01 - EP US); **F04C 18/356** (2013.01 - EP US); **F04C 23/005** (2013.01 - EP US); **F04C 23/008** (2013.01 - EP US);
F04C 23/02 (2013.01 - CN); **F04C 27/00** (2013.01 - US); **F04C 29/02** (2013.01 - US); **F25B 13/00** (2013.01 - US); **F25B 31/026** (2013.01 - US);
F04C 2240/30 (2013.01 - US); **F04C 2240/603** (2013.01 - US)

Citation (search report)

[XA] CN 106247657 A 20161221 - UNIV XIAN JIAOTONG

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3795835 A1 20210324; **EP 3795835 A4 20210421**; CN 108799118 A 20181113; CN 108799118 B 20240524; CN 208831238 U 20190507;
US 2021140689 A1 20210513; WO 2020006986 A1 20200109

DOCDB simple family (application)

EP 18925400 A 20181212; CN 201810729765 A 20180705; CN 2018120658 W 20181212; CN 201821059762 U 20180705;
US 201817254222 A 20181212